TRS Pension Plan
Long-Term Funding

Actuarial Valuation
as of July 1, 2011,
and Beyond

Basic Retirement Funding Equation

$$C + I = B + E$$

C = Contributions

I = Investment Income

B = Benefits Paid

E = Expenses (administration)

Basic Concepts

Contribution For	Description
Normal Cost	Value of this year's expected benefit accruals
UAAL	Unfunded Actuarial Accrued Liability = Accrued Liability - Assets

"Unfunded Liabilities" are a natural part of retirement system funding, comparable to a mortgage on a home. A plan which is 100% funded is required to contribute the normal cost.

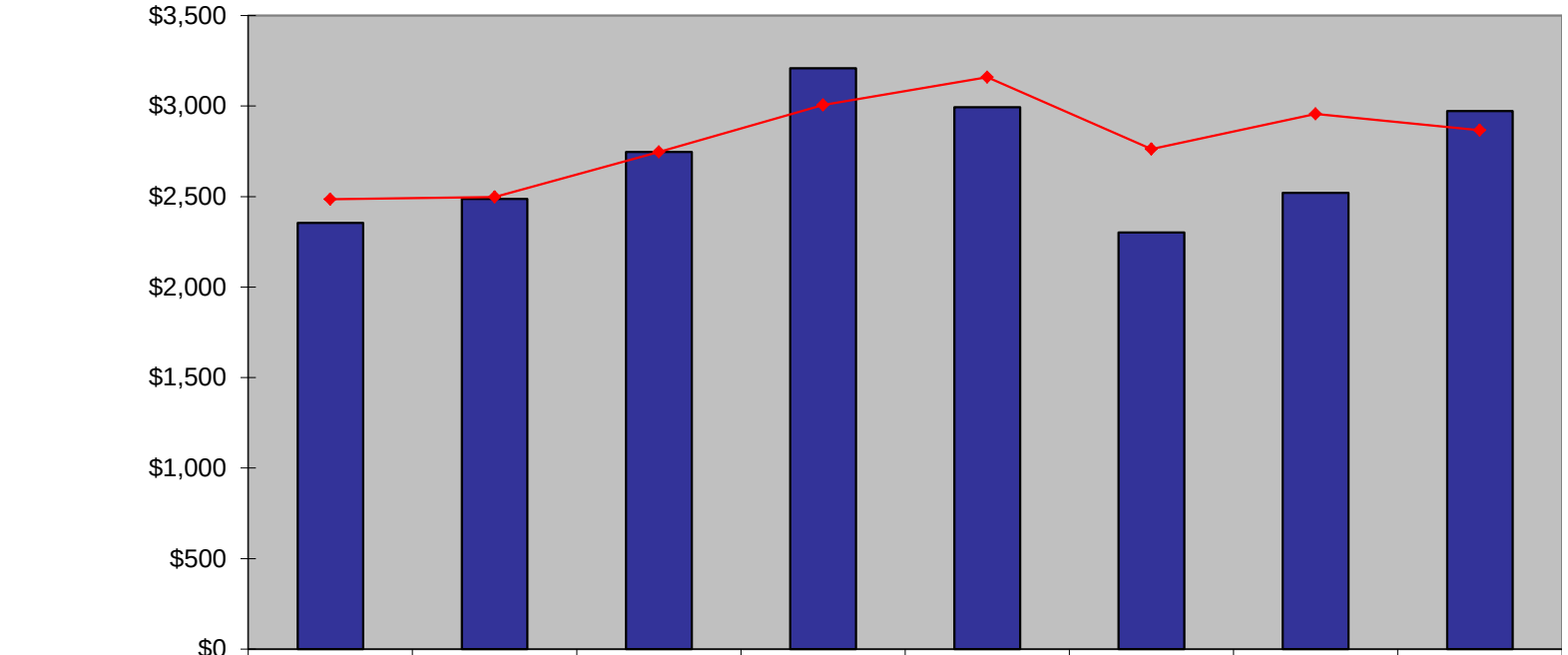
2011 Valuation Results

- 2011 Valuation - For Informational Purposes Only
- Annual Required Employer Contribution Increase, Based on 2011 Valuation
  - 3.53% (9.96% to 13.49% - $28 million/year)
  - 4.63% by the time the legislature meets in 2013
- Market asset return 21.67% vs. 7.75% expected return (13.92% more than expected).
- In six of the last ten years, TRS's investment returns exceeded our expected rate of 7.75%.

2011 Valuation Results

- Funded Ratio
  - Funding declined from 65.44% to 61.53%
- Amortization Period increased from 49.5 years 71 Years
- Benefit Changes (HB 116 Effective July 1, 2011)
  - Early retirement factors changed to current actuarial equivalent
    - Reduced Unfunded Accrued Liability $6.7 million
    - Reduced Normal Rate 0.12%

TRS Assets ($ Millions)



	2004	2005	2006	2007	2008	2009	2010	2011
Market Value	$2,355	$2,487	$2,746	$3,209	$2,993	$2,302	$2,521	$2,972
Actuarial Value	$2,486	$2,498	$2,746	$3,006	$3,159	$2,762	$2,957	$2,866

	2004	2005	2006	2007	2008	2009	2010	2011
Market Return	**13.3%**	**8.0%**	**8.9%**	**17.6%**	**(4.9)%**	**(20.8)%**	**12.9%**	**21.7%**
Actuarial Return	**2.1%**	**2.7%**	**8.5%**	**10.2%**	**7.2%**	**(10.3)%**	**9.8%**	**(0.1)%**

Funding Results

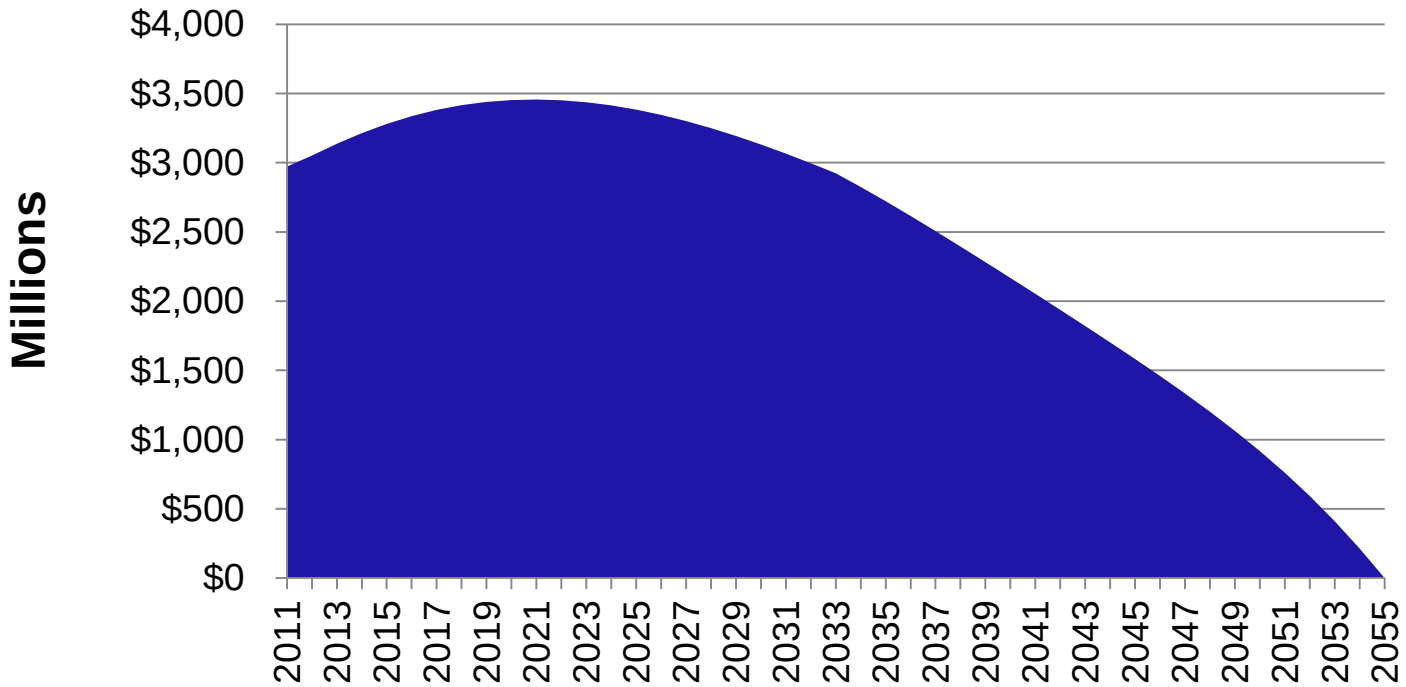
	July 1, 2011 Valuation	July 1, 2010 Valuation
Total Normal Cost Rate	9.64%	9.74%
Less Member Rate	7.15%	7.15%
Employer Normal Cost Rate	2.49%	2.59%
Rate to Amortize UAAL	7.47%	7.37%
Total Employer Statutory Rate	9.96%	9.96%
Actuarially Required for Fiscal Year Ended 2012	N/A	12.16%
Actuarially Required for Fiscal Year Ended 2013	13.49%	14.18%
Actuarial Accrued Liability	$4,658.6 million	$4,518.2 million
Actuarial Value of Assets	$2,866.5 million	$2,956.6 million
Unfunded Accrued Liability	$1,792.1 million	$1,561.6 million
Amortization Period (Statutory Rate)	71 years	49.5 years

Recent History

- Recent market downturn: 401(k) investors lost 1/3 of their account balance; funding shortfalls for defined benefit plans.
- Employer and employee contribution rates are set in State Statute:
  - Employers contribute 7.47%
  - Employees contribute 7.15%
  - State contributes 2.49%
- In the past these contributions were sufficient to fund the normal cost and amortize the Unfunded Actuarial Accrued Liability (UAAL) within a 30-year period.
- Unless we see extraordinary investment gains in the future, current employer and employee contribution rates are ***not*** sufficient to fund the pension plan (TRS will run out of money).

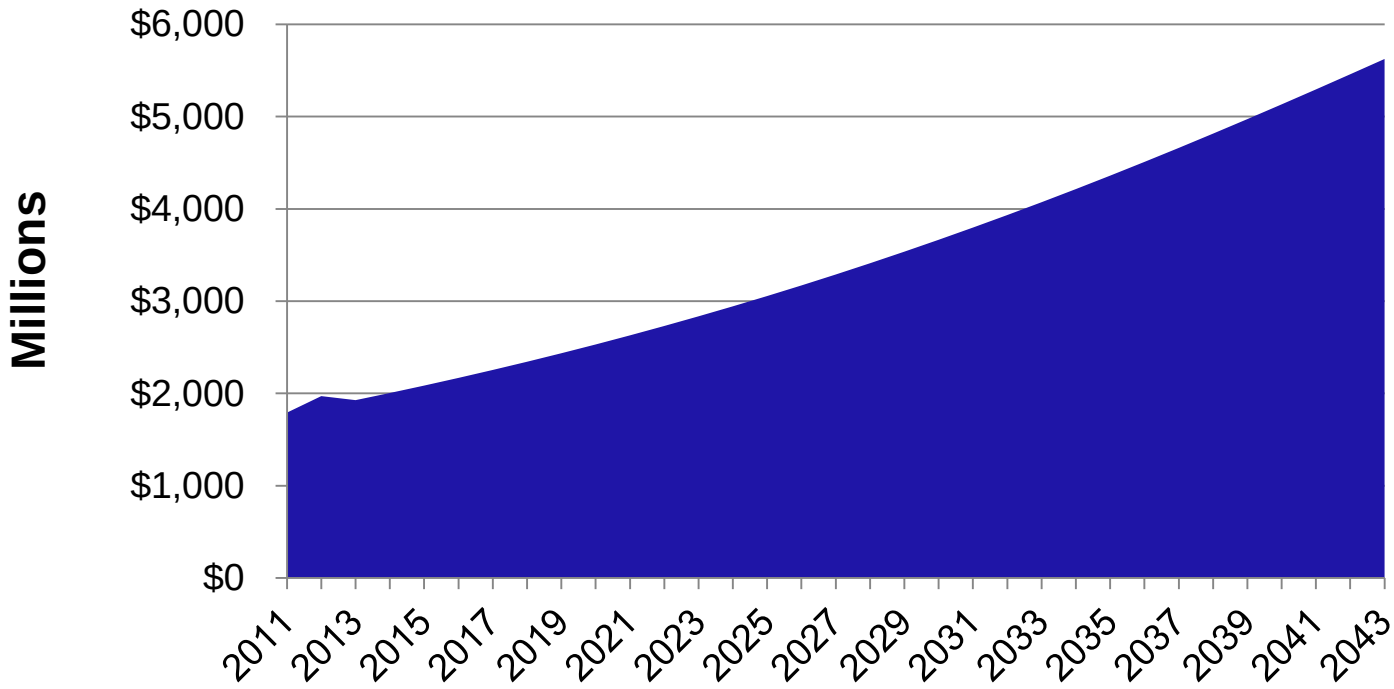
Projection of System Assets (with current contribution rates)

Member Contribution Rate – 7.15%
Employer/State Contribution Rate – 9.96%



Projection of System's Unfunded Accrued Liability

Member Contribution Rate – 7.15%
Employer Contribution Rate – 9.96%



We Still Have Options

- System runs out of money by 2055.
- We can prevent that by phasing in incremental changes. Other states are:
  - Raising revenues
    - Increase contribution rates
    - Tap new funding sources
  - Reducing benefits
    - For current members
    - For new hires
- What will work for Montana?
  - We need a combination: a package of alternatives everyone can live with.

Alternatives Considered by Other States for Current Active Members

- Set triggers to Adjust Future Contributions and/or Benefits
- Phase in plan changes equitably
- Increase Employee Contribution Rates
  - ↑ 0.50% to **7.65%**
  - ↑ 1.00% to **8.15%**
- Base Average Final Compensation on 5 years (instead of current 3 years)
- Reduce Multiplier from 1.67% to 1.50%
- Raise vesting from 5 years to 10 years
- Suspend GABA
- Reduce GABA
- Raise early retirement from age 50 and 5 years of service to age 55 and 5 years of service
- Raise regular retirement from age 60 and 5 years of service or 25 years of service regardless of age to:
  - Age 60 and 5 years of service or 30 years of service regardless of age, or
  - Age 65 and 5 years of service or 30 years of service regardless of age

Impact of Alternatives
(Changes for Current Members)

Raise Employee Contribution Rate

Plan Element	Current Plan	Alternatives	
Employee Contribution Rate	7.15%	7.65%	8.15%
Amortization Period	71 years	61 years	53 years
Shortfall	3.53%	3.16%	2.72%

Extend Average Final Compensation

Plan Element	Current Plan	Alternative
Average Final Compensation	3 Years	5 Years
Amortization Period	71 years	53 years
Shortfall	3.53%	2.62%

Impact of Alternatives
(Changes for Current Members)

Reduce Multiplier

Plan Element	Current Plan	Alternative
Multiplier	1.667%	1.50%
Amortization Period	71 years	40 years
Shortfall	3.53%	1.36%

Reduce Guaranteed Annual Benefit Adjustment

Plan Element	Current Plan	Alternative
Guaranteed Annual Benefit Adjustment	1.50%	1.25%
Amortization Period	71 years	62 years
Shortfall	3.53%	3.14

Impact of Alternatives
(Changes for Current Members)

Raise Early Retirement

Plan Element	Current Plan	Alternative
Early Retirement	Age 50 and five years of service	Age 55 and five years of service
Amortization Period	71 years	70 years
Shortfall	3.53%	3.48%

Raise Regular Retirement

Plan Element	Current Plan	Alternatives	
Regular Retirement	Age 60 and 5 or 25 Years of Service	Age 60 and 5 or 30 Years of Service	Age 65 and 5 or 30 Years of Service
Amortization Period	71 years	54 years	41 years
Shortfall	3.53%	2.66%	1.59%

Impact of Alternatives
(Changes for Current Members)

Raise Vesting Period

Plan Element	Current Plan	Alternative
Vesting	5 Years	10 Years
Amortization Period	71 years	68 years
Shortfall	3.53%	3.43%

Possible Plan Changes for New Hires (Two-Tier Plan)

- Raise Average Final Compensation from 3 to 5 consecutive years
- Change Multiplier (currently at 1.667%) to 1.5%, or 2.00%
- Raise regular retirement eligibility (currently any age w/25 yrs, or 60 & 5) to age 60 and 5 years of service
- Raise early retirement eligibility (currently age 50 w/5 yrs) to age 55 and 5 years of service
- Reduce GABA (currently 1.5% & 36 months) to 1.25% & 36 months or 1.50% & 36 months
- Increase employee contribution rate 0.5%, from 7.15% to 7.65%

Impacts of Possible Changes for New Hires

- 1.50% Multiplier
- 5 year Average Final Compensation
- Age 60 and 5 years of service retirement eligibility
- 0.50% employee contribution rate increase
- Guaranteed Annual Benefit Adjustments (GABAs)

	Current Plan	1.00% GABA	1.25% GABA	1.50% GABA
Normal Rate	9.74%	7.35%	7.47%	7.58%
Member Contribution Rate	7.15%	7.65%	7.65%	7.65%
Employer Normal Rate	2.59%	(0.30)%	(0.18)%	(0.07)%
Savings		2.89%	2.77%	2.66%

Impacts of Possible Changes for New Hires

- 2.00% Multiplier
- 5 year Average Final Compensation
- Age 60 and 5 years of service retirement eligibility
- 0.50% employee contribution rate increase
- Guaranteed Annual Benefit Adjustments (GABAs)

	Current Plan	1.00% GABA	1.25% GABA	1.50% GABA
Normal Rate	9.74%	9.39%	9.55%	9.70%
Member Contribution Rate	7.15%	7.65%	7.65%	7.65%
Employer Normal Rate	2.59%	1.74%	1.90%	2.05%
Savings		0.85%	0.69%	0.54%

The Bottom Line

- Changing contribution and/or benefit rates for **new hires** will have a **smaller effect** than changes to current members. The pool of new hires is small (about 200 added a year), and they typically earn less than members with more years of service.

- Either: (1) The total contribution rate (currently at 17.11%) must increase by 3.53% by 2013 to return TRS to actuarial soundness over a 30-year amortization period, or

  (2) The 3.53% shortfall must be made up through a combination of contribution increases, benefit reductions, and changes to plan elements.

Why Not Move to a Defined Contribution (DC) or Hybrid Plan?

- Does nothing to pay off unfunded liability.
- Would harm teacher recruitment and retention rates (average teacher salary in MT is $40k, 50th out of 51 in US).
- DB plans are more efficient, delivering the same level of benefits for half (46%) the cost of DC plans (NIRS study).

Summary

- The good news is **the unfunded liability does not come due all at once.** Rather, the retirement system will realize those liabilities over 20 to 30 years as today's teachers retire.
- Far from needing an immediate and staggering infusion of taxpayer dollars, **the fund can be righted with more prudent, gradual, and relatively small adjustments.**
- **Any changes can be incremental and phased in over time.**
- **The sooner we make those adjustments, the better the outcome will be for everyone—teachers, retirees, employers, and taxpayers.**
- **We're working on the issue and will continue to seek your input as we move forward.**

We Want to Hear from YOU

1. How would you describe the situation surrounding the long-term funding of the Montana Teachers' Retirement pension plan?

2. If we continue on the present course, what will be the most likely outcome? Is that outcome acceptable to you?

3. For a better outcome, given the range of options, describe a package of choices you can live with.

4. How would you suggest moving forward? What are the next steps? Who needs to do what?

5. Is there anyone else we should talk with?

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